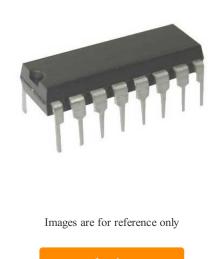


INST Amp Single ±18V 16-Pin PDIP Tube

Manufacturer:	Analog Devices, Inc.
Package/Case:	DIP-16
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	NRND



General Description

The AD625 is a precision instrumentation amplifier specifically designed to fulfill two major areas of application: 1) Circuits requiring nonstandard gains (i.e., gains not easily achievable with devices such as the AD524 and AD624). 2) Circuits requiring a low cost, precision software programmable gain amplifier. For low noise, high CMRR, and low drift the AD625JN is the most cost effective instrumentation amplifier solution available. An additional three resistors allow the user to set any gain from 1 to 10,000. The error contribution of the AD625JN is less than 0.05% gain error and under 5 ppm/°C gain TC; performance limitations are primarily determined by the external resistors. Common-mode rejection is independent of the feedback resistor matching. A software programmable gain amplifier (SPGA) can be configured with the addition of a CMOS multiplexer (or other switch network), and a suitable resistor network. Because the ON resistance of the switches is removed from the signal path, an AD625 based SPGA will deliver 12-bit precision, and can be programmed for any set of gains between 1 and 10,000, with completely user selected gain steps.

For the highest precision the AD625C offers an input offset voltage drift of less than 0.25 μ V/°C, output offset drift below 15 μ V/°C, and a maximum nonlinearity of 0.001% at>

The AD625 is available in three accuracy grades (A, B, C) for industrial (-40°C to +85°C) temperature range, two grades (J, K) for commercial (0°C to +70°C) temperature range, and one (S) grade rated over the extended (-55°C to +125°C) temperature range.

Key Features

0.02% Maximum low gain error

5ppm/°C Maximum low gain TC

0.001% Maximum low nonlinearity

 $25\mu V$ Low offset voltage

Recommended For You

AD8309ARUZ

Analog Devices, Inc

TSSOP16

AD8221ARZ

Analog Devices, Inc SOP8

ADA4930-2YCPZ-R7

Analog Devices, Inc

LFCSP24

AD633JRZ Analog Devices, Inc SOP8

ADCMP600BKSZ-R2

Analog Devices, Inc

SC70-5

AD524BDZ

Analog Devices, Inc CDIP-16

AD627BRZ Analog Devices, Inc SOP8

AD8034ARZ Analog Devices, Inc SOP8

AD632AH Analog Devices, Inc CAN10

AD620BN Analog Devices, Inc DIP8 AD8221BR

Analog Devices, Inc SOP-8

AD622ANZ Analog Devices, Inc DIP8

AD8561ARZ Analog Devices, Inc

SOP8

AD8422BRZ Analog Devices, Inc SOP8

Analog Devices, Inc SOP

AD620BR